

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re U.S. Patent Application of )  
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 NAKAMURA et al. )  
 )  
 Application Number: To be Assigned )  
 )  
 Filed: Concurrently Herewith )  
 )  
 For: MAGNETIC RECORDING MEDIUM, MAGNETIC )  
 RECORDING APPARATUS USING THE SAME, )  
 AND METHOD AND APPARATUS FOR )  
 MANUFACTURING THE MAGNETIC RECORDING )  
 MEDIUM )  
 )  
 ATTORNEY DOCKET NO. HIRA.0115 )

Honorable Assistant Commissioner  
for Patents  
Washington, D.C. 20231

**INFORMATION DISCLOSURE STATEMENT**

Sir:

Pursuant to 37 C.F.R. §§ 1.56 and 1.97, this Information Disclosure Statement is submitted in the above-identified patent application. A listing of documents to be published on the face of any patent granted from this application is submitted herewith on Form PTO-1449. Any other documents or information submitted for consideration by the Examiner are listed in this paper. A copy of each U.S. and foreign patent, or each publication or portion thereof listed or herein identified, submitted herewith.

This Information Disclosure Statement is submitted with the initial filing of the application. Accordingly, no fee is due or payable at this time.

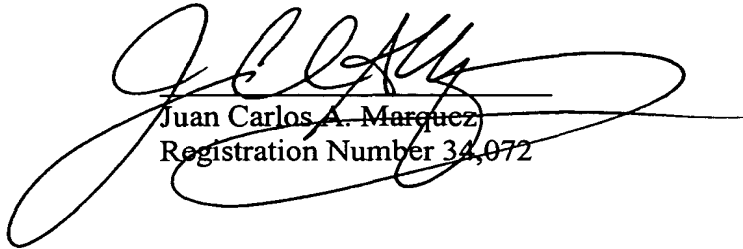
The Examiner is requested to acknowledge consideration of the information provided in this paper in accordance with prescribed procedures.

Please charge any additional fees or credit any overpayments in connection with this paper to Deposit Account No. 08-1480.

Respectfully submitted,

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Form PTO 1449  U.S. Department of commerce Patent and Trademark Office  Information Disclosure Statement by Applicant	ATTY. DOCKET NUMBER	SERIAL NUMBER
	HIRA.0115	To be assigned
	APPLICANT	
	NAKAMURA et al.	
	FILING DATE	GROUP
	Concurrently herewith	

U.S. Patent Documents

Examiner Initial		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
		4,656,546	04/07/87	Mallory			01/22/85

Foreign Patent Documents

Examiner Initial		DOCUMENT NUMBER	FILING DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION	
							YES	No
		58-128023	01/25/82	Japan			Abstract	X
		9-212855	02/05/96	Japan			Abstract	X
		2000-48340	07/26/99	Japan			Abstract	X
		2001-14664	06/30/99	Japan			Abstract	X
		2002-109729	09/27/00	Japan			Abstract	X

Other Documents (Including Author, Title, Date Pertinent Pages, Etc.)

		K. Ozawa and M. Takahashi, "Iron Thin Film Magnetic Recording Tape By Vacuum Deposition", IEEE Transactions on Magnetics, Vol. Mag-19, No. 5, September 1983, pp. 1635-1637
		Kiyoshi Yamakawa, Kazuyuki Ise, Shingo Takahashi, and Kazuhiro Ouchi, "A New Single-Pole Head Structure for High Writability", IEEE Transactions on Magnetics, Vol. 38, No. 1, January 2002, pp. 163-168
		M. Mallory, A. Torabi, and M. Benakli, "One Terabit per Square Inch Perpendicular Recording Conceptual Design", IEEE Transactions on Magnetics, Vol. 38, No. 4, July 2002, pp. 1719-1724
		Weixing Xia, Hiroaki Muraoka and Yoshihisa Nakamura, "High-Field Gradient Single-Pole With an Improved Pole Structure", IEEE Transactions on Magnetics, Vol. 38, No. 5, September 2002, pp. 2216-2218
		Kai-Zhong Gao and H. Neal Bertram, "Magnetic Recording Configuration for Densities Beyond 1 Tb/in <sup>2</sup> and Data Rates Beyond 1 Gb/s", IEEE Transactions on Magnetics, Vol. 38, No. 6, November 2002, pp. 3675-3683
EXAMINER		DATE CONSIDERED
<i>Examiner: Initial if citation is considered, whether or not citation is in conformance with MPEP 609; draw a line through citation if not in conformance and not considered. Include a copy of this form with next communication to applicant</i>		